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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/627,348	MARTI, CARLOS GONZALEZ	
	Examiner	Art Unit	
	HILINA S. KASSA	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 March 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/25/2008 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 9, 17, 26 and 27 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xu et al. (US 2004/0065739 A1) and Wu et al. (US 2004/0128513 A1), and further in view of Marshall (US Patent Number 7,025,269 B2).

(1) regarding claim 1:

Xu et al. discloses a method and processor for obtaining printed instances of a document comprising:

Including a definition of a user data input field in the electronic document data (**paragraph 23, lines 1-2, paragraph 30, lines 1-8**), for receiving a string of characters entered in said field (**page 3, paragraph 29 "key cryptography" which is considered as a field users could enter data to have it encrypted, page 2, paragraph 18 "overwrite individual data elements"**);

Xu et al. discloses all of the subject mater as described above except for the method of distributing copies of electronic document data to a document processors and the electronic document data containing instructions for printing each instance from a respective one of the document processors.

However, Wu et al. teaches that electronic document could be sent out (distributed) by a document processor via the Internet (**paragraph 22, lines 7-8, paragraph 11, lines 1-3**) to be modified and printed. In order to have an electronic document printed, the printer driver is invoked. Data contained in the document are first converted to printer command that is retrieved from the printer control firmware (**paragraph 25, lines 1-7**).

One skilled in the art would have clearly recognized an electronic document or computer file that needs to be distributed or passed before it gets printed or processed by a document processor. Another method was related to the secured printing of the electronic document and tracking of the distribution path of the document after printing (paragraph 7, lines 5-8). Having said that, the method and processes used by Xu et al. increases the use for distributing of an electronic document to encode any information as a barcode code and to have it printed. Thus, the electronic form could be an on line e-application (paragraph 30, lines 4-8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the barcode code when loading an electronic form as taught by Wu et al. and having it to print the decoded elements of a barcode that is stated in entered as described in the method of Xu et al. to provide more efficiency when printing a decoded barcode.

Xu et al. and Wu et al. disclose all of the subject matter as described as above except for specifically teaching Including an embedded program *embedded* in the electronic document data, linked to the user data input filed, *wherein the embedded program* generates commands to print geometrical elements of a barcode code, that represent a series of codewords derived *by the embedded program* from the characters in the string received *from the user data input field*, each codeword being represented as a respective configuration of printed geometrical elements and their background in a respective area of the barcode.

However, Marshall discloses Including an embedded program *embedded* in the electronic document data (**column 2, lines 11-13; note that a program embedding a**

security features within barcodes is disclosed), linked to the user data input filed, *wherein the embedded program* generates commands to print geometrical elements of a barcode code (**column 2, lines 11-17; note that the embedded program generates source code segments configured to receive a string of alphanumeric data and generate printable data**), that represent a series of codewords derived *by the embedded program* from the characters in the string received *from the user data input field* (**column 4, lines 49-52; note that per receiving the string of alphanumeric data, numerous patterns, sizes and shapes for embedded features can be programmed as described**), each codeword being represented as a respective configuration of printed geometrical elements and their background in a respective area of the barcode (**column 4, lines 52-55; note that the various patterns of barcodes including the source code or the embedded feature can be printed in the respective area of the barcode**).

Xu et al. and Wu et al. and Marshall are combinable because they are from the same field of endeavor i.e. printing of a barcode. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to include an embedded program *embedded* in the electronic document data, linked to the user data input filed, *wherein the embedded program* generates commands to print geometrical elements of a barcode code, that represent a series of codewords derived *by the embedded program* from the characters in the string received *from the user data input field*, each codeword being represented as a respective configuration of printed geometrical elements and their background in a respective area of the barcode. The

suggestion/motivation for doing so would have been in order to utilize a reliable and secure data embedded in a barcode (column 1, lines 44-54). Therefore, it would have been obvious to combine Xu et al., Wu et al. with Marshall to obtain the invention as specified in claim 1.

(2) regarding claim 2:

Xu et al. further discloses, wherein the embedded program (**4 figure 1, paragraph 25, lines 10-19**) is arranged to make at least one of the configurations dependent on a further factor other than the codeword represented by the configuration that will be decoded upon decoding the barcode (**7 figure 1, paragraph 24, lines 5-11, paragraph 25, lines 10-21**).

(3) regarding claim 3:

Xu et al. further discloses, wherein the embedded program makes the configurations dependent on the specific area in which the codeword is represented, so that mutually different configurations (**2, 3 figure 1, paragraph 21, lines 1-9**) will result from representing a specific codeword dependent on whether the specific codeword is represented in one region or another (**paragraph 24, lines 5-11, paragraph 25, lines 10-21**).

(4) regarding claim 4:

Xu et al. further discloses, wherein the embedded program is arranged to control printing of the barcode as a two dimensional barcode (**paragraph 6, lines 2-7 "placed on an item" – similar to printing**), at least part of the areas having mutually different shapes (**paragraph 8, lines 3-9**) the embedded program adapting the commands to print the elements of the configuration that is used to represent a codeword according to the shape of the area in which the codeword is represented (**35 figure 2, paragraph 34, lines 1-7**).

(5) regarding claim 5:

Xu et al. further discloses, wherein the embedded program is arranged to include additional information in the areas, the additional information being independent of the codewords represented in the areas, (**could be a signature in an electronic form, paragraph 33, lines 16-21, Xu explains that the barcode could be decoded with an additional information independent of the initial information that had been stated**) the additional information being included by adding geometrical elements, removing geometrical elements an/or modifying visual properties of part of the geometrical elements that represent at least one of the codewords (**paragraph 33, lines 21-32), not affecting a decoded result when the barcode is decoded after scanning (42 figure 2, paragraph 35, lines 3-11, paragraph 36, lines 1-5**).

(6) regarding claim 6:

Xu et al. further discloses, wherein the embedded program is arranged to print additional geometrical elements that extend from within a region that is defined by all geometrical elements (**101 figure 3A, graphic figure could have geometrical elements, paragraph 37, lines 6-8**) that will be used to decode the barcode in the printed document, to outside said region among further printed items of the documents, so that the additional geometrical elements do not affect a decoded result when the barcode is scanned and decoded (**paragraph 37, lines 1-12**).

(7) regarding claim 7:

Xu et al. further discloses, wherein the geometrical elements each have a property that does not affect the decoded data (**paragraph 27, lines 1-5**) the embedded program being arranged to set said property in different ones of geometrical elements in at least one area that represents a codeword differently during printing (**paragraph 54, lines 1-3, paragraph 55, line 3-4**).

(8) regarding claim 8:

Xu et al. further discloses, wherein the embedded program is arranged to select a color and/or grey level density of different geometrical elements differently (**paragraph 25, lines 1-10, paragraph 27, lines 1-7**), as a predetermine function of position in an area where the barcode is printed (**paragraph 51, lines 2-10 " there is no specific limitation for the printing the barcode; however the barcode could be printable"**).

5. Claims 17-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xu et al. (US 2004/0065739 A1) in view of Marshall (US Patent Number 7,025,269 B2).

(1) regarding claim 17:

Xu et al. further discloses, an electronic form stored on a computer that contains a definition of a user data entry field (**paragraph 23, lines 1-2, paragraph 30, lines 1-8**).

Xu et al. disclose all of the subject matter as described as above except for specifically teaching receiving a string of input characters from a user and embedded program *embedded* in the electronic form, linked to the user data input filed, *wherein the embedded program* generates commands to print geometrical elements of a barcode code, that represent a series of codewords derived *by the embedded program* from the characters in the string received *from the user data input field*, each codeword being represented as a respective configuration of printed geometrical elements and their background in a respective area of the barcode.

However, Marshall discloses receiving a string of input characters from a user and embedded program *embedded* in the electronic form (**column 2, lines 11-13; note that a program embedding a security features within barcodes is disclosed**), linked to the user data input filed, *wherein the embedded program* generates commands to print geometrical elements of a barcode code (**column 2, lines 11-17; note that the embedded program generates source code segments configured to**

receive a string of alphanumeric data and generate printable data), that represent a series of codewords derived *by the embedded program* from the characters in the string received *from the user data input field* (**column 4, lines 49-52; note that per receiving the string of alphanumeric data, numerous patterns, sizes and shapes for embedded features can be programmed as described**), each codeword being represented as a respective configuration of printed geometrical elements and their background in a respective area of the barcode (**column 4, lines 52-55; note that the various patterns of barcodes including the source code or the embedded feature can be printed in the respective area of the barcode**).

Xu et al. and Wu et al. and Marshall are combinable because they are from the same field of endeavor i.e. printing of a barcode. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to receive a string of input characters from a user and embedded program *embedded* in the electronic document data, linked to the user data input filed, *wherein the embedded program* generates commands to print geometrical elements of a barcode code, that represent a series of codewords derived *by the embedded program* from the characters in the string received *from the user data input field*, each codeword being represented as a respective configuration of printed geometrical elements and their background in a respective area of the barcode. The suggestion/motivation for doing so would have been in order to utilize a reliable and secure data embedded in a barcode (column 1, lines 44-54). Therefore, it would have been obvious to combine Xu et al. with Marshall to obtain the invention as specified in claim 17.

(2) regarding claim 18:

Xu et al. further discloses, an electronic form according to claim 17, wherein the embedded (**4 figure 1, paragraph 25, lines 10-19**) program is arranged to make at least one of the configurations dependent on a further factor other than the codeword represented by the configuration that will be decoded upon decoding the barcode (**7 figure 1, paragraph 24, lines 5-11**).

(3) regarding claim 19:

Xu et al. further discloses, an electronic form according to claim 17, wherein the embedded program makes the configurations dependent on the specific area in which the codeword is represented, so that mutually different configurations (**2, 3 figure 1, paragraph 21, lines 1-9**) will result from representing a specific codeword dependent on whether the specific codeword is represented in one region or another (**paragraph 24, lines 5-11, paragraph 25, lines 10-21**).

(4) regarding claim 20:

Xu et al. further discloses, an electronic form as claimed in claim 19, wherein the embedded program is arranged to control printing of the barcode as a two dimensional barcode (**paragraph 6, lines 2-7 "placed on an item" – similar to printing**), at least part of the areas having mutually different shapes (**paragraph 8, lines 3-9**), the embedded program adapting the commands to print the elements of the configuration

that is used to represent a codeword according to the shape of the area in which the codeword is represented (**35 figure 2, paragraph 34, lines 1-7**).

(5) regarding claim 21:

Xu et al. further discloses, an electronic form as claimed in claim 19, wherein the embedded program is arranged to include additional information in the areas (**could be a signature in an electronic form, paragraph 33, lines 16-21, Xu explains that the barcode could be decoded with an additional information independent of the initial information that had been stated**), the additional information being independent of the codewords that are represented in the areas, the additional information being included by adding geometrical elements, removing geometrical elements and/or modifying visual properties of part of the geometrical elements that represent at least one of the codewords (**paragraph 33, lines 21-32**), dependent on the area in which the codeword is represented in a way that does not affect a decoded result when the barcode is scanned and decoded (**paragraph 37, lines 1-12**).

(6) regarding claim 22:

Xu et al. further discloses, an electronic form as claimed in claim 21, wherein the embedded program is arranged to print additional geometrical elements that extend from within a region that is defined by all geometrical elements (**101 figure 3A, graphic figure could have geometrical elements, paragraph 37, lines 6-8**) that will be used to decode the barcode in the printed document, to outside said region among further

printed items of the documents, so that the additional geometrical elements do not affect a decoded result when the barcode is scanned and decoded (**paragraph 37, lines 1-12**).

(7) regarding claim 23:

Xu et al. further discloses, an electronic form as claimed in claim 21, wherein the geometrical elements each have a property that does not affect the decoded data (**paragraph 27, lines 1-5**) the embedded program being arranged to set said property in different ones of geometrical elements in at least one area that represents a codeword differently during printing (**paragraph 54, lines 1-3, paragraph 55, line 3-4**).

(8) regarding claim 24:

Xu et al. further discloses, an electronic form as claimed in claim 23, wherein the embedded program is arranged to select a color and/or grey level density of different geometrical elements differently (**paragraph 25, lines 1-10, paragraph 27, lines 1-7**), as a predetermined function of position in an area where the barcode is printed (**paragraph 51, lines 2-10 "there is no specific limitation for the printing the barcode; however the barcode could be printable**").

(8) regarding claim 25:

Xu et al. further discloses, a machine readable medium, comprising an electronic from stored on a computer (**paragraph 33, lines 5-13**) according to claim 17.

(10) regarding claim 26:

Xu et al. further discloses, a method of authoring an electronic document, the method comprising:

including a definition of a field for entering a string of characters in the document (**3A figure 1, paragraph 30, lines 1-8, claim 2, line 3**);

Xu et al. disclose all of the subject matter as described as above except for specifically teaching providing software building blocks for building an embedded program *embedded in the electronic document, the embedded* generating commands to print geometrical elements of a barcode, so that the generated barcode is decodable according to a predetermined standard; assembling the building blocks into the embedded program during authoring of the document, while adapting the embedded program to make a visual aspect of the barcodes generated under control of the embedded program specific to the document and/or the field, without affecting a result of decoding the barcode.

However, Marshall discloses providing software building blocks for building an embedded program *embedded in the electronic document, the embedded program* (**column 2, lines 11-13; note that a program embedding a security features within barcodes is disclosed**), generating commands to print geometrical elements of a barcode, so that the generated barcode is decodable according to a predetermined standard (**column 2, lines 11-17; note that the embedded program generates source code segments configured to receive a string of alphanumeric data and**

generate printable data), assembling the building blocks into the embedded program during authoring of the document (**column 1, lines 58-61; note that authentication feature of a barcode is provided**), while adapting the embedded program to make a visual aspect of the barcodes generated under control of the embedded program specific to the document and/or the field, without affecting a result of decoding the barcode (**column 4, lines 52-55; note that the various patterns of barcodes including the source code or the embedded feature can be printed in the respective area of the barcode**).

Xu et al. and Wu et al. and Marshall are combinable because they are from the same field of endeavor i.e. printing of a barcode. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to providing software building blocks for building an embedded program *embedded in the electronic document, the embedded* generating commands to print geometrical elements of a barcode, so that the generated barcode is decodable according to a predetermined standard; assembling the building blocks into the embedded program during authoring of the document, while adapting the embedded program to make a visual aspect of the barcodes generated under control of the embedded program specific to the document and/or the field, without affecting a result of decoding the barcode. The suggestion/motivation for doing so would have been in order to utilize a reliable and secure data embedded in a barcode (column 1, lines 44-54). Therefore, it would have been obvious to combine Xu et al. with Marshall to obtain the invention as specified in claim 26.

(11) regarding claim 27:

Xu et al. further discloses, a document authoring machine, for generating an electronic document that includes a field for entering a string of characters (**3A figure 1, paragraph 30, lines 1-8, claim 2, line 3**).

Xu et al. disclose all of the subject matter as described as above except for specifically teaching providing software building blocks for building an embedded program *embedded in the electronic document, the embedded* generating commands to print geometrical elements of a barcode, so that the generated barcode is decodable according to a predetermined standard; assembling the building blocks into the embedded program during authoring of the document, while adapting the embedded program to make a visual aspect of the barcodes generated under control of the embedded program specific to the document and/or the field, without affecting a result of decoding the barcode.

However, Marshall discloses providing software building blocks for building an embedded program *embedded in the electronic document, the embedded program* (**column 2, lines 11-13; note that a program embedding a security features within barcodes is disclosed**), generating commands to print geometrical elements of a barcode, so that the generated barcode is decodable according to a predetermined standard (**column 2, lines 11-17; note that the embedded program generates source code segments configured to receive a string of alphanumeric data and generate printable data**), assembling the building blocks into the embedded program

during authoring of the document (**column 1, lines 58-61; note that authentication feature of a barcode is provided**), while adapting the embedded program to make a visual aspect of the barcodes generated under control of the embedded program specific to the document and/or the field, without affecting a result of decoding the barcode (**column 4, lines 52-55; note that the various patterns of barcodes including the source code or the embedded feature can be printed in the respective area of the barcode**).

Xu et al. and Wu et al. and Marshall are combinable because they are from the same field of endeavor i.e. printing of a barcode. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to providing software building blocks for building an embedded program *embedded in the electronic document, the embedded* generating commands to print geometrical elements of a barcode, so that the generated barcode is decodable according to a predetermined standard; assembling the building blocks into the embedded program during authoring of the document, while adapting the embedded program to make a visual aspect of the barcodes generated under control of the embedded program specific to the document and/or the field, without affecting a result of decoding the barcode. The suggestion/motivation for doing so would have been in order to utilize a reliable and secure data embedded in a barcode (column 1, lines 44-54). Therefore, it would have been obvious to combine Xu et al. with Marshall to obtain the invention as specified in claim 27.

6. Claims 9-16 rejected under 35 U.S.C. 103(a) as being unpatentable over Xu et al. (US 2004/0065739 A1) and further in view of Koakutsu et al. (US Patent Number 6,906,812 B2).

(1) regarding claim 9:

Xu et al. discloses a method for processing an electronic document processor comprising:

A user data input device and a connection for a printer, the electronic document processor having a loaded electronic form that contains a definition of a user data entry field for receiving a string of input characters from a user (**paragraph 33, lines 5-13**),

The processor being arranged to extract and execute an embedded program from the document, the embedded program *embedded in the electronic form from the document*, the embedded program being linked to the user data input field, wherein *the embedded program generates* commands to print geometrical elements of a barcode that encodes a series of codewords derived *by the embedded program* from the characters in the string *received from the user data input field*, each codeword represented as a configuration of printed geometrical elements and their background in a respective area of the barcode (paragraph 23, lines 1-7).

Xu et al. discloses all of the subject mater as described above except for the user data input device and a connection for a printer.

However, Koakutsu et al. shows the connection between user data input device (90 figure 1, column 6, lines 51-52, column 7, lines 44-48) and a printer (1 figure 1,

column 6, lines 51-52, column 7, lines 44-48). A barcode or similar symbol can be printed accurately with in a specified printing area by a printer. For printing such symbols, the printer has a symbol image generator for converting display data to a symbol and has hardware or software for reporting the size of the converted symbol to a host device. The host sends specific commands and text data for representation in the printed symbol to the printer for printing (abstract).

Once skilled in the art would have clearly recognized that a user data input device and connectivity to a printer are the very essential elements to have an electronic document data printed. The host device or an application running on the host device only needs to send the information to be displayed to the printer (column 3, lines 13-15). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to have a host device or data input device and connectivity to a printer to as taught by Koakutsu et al. in the method of Xu et al. in order to efficiently print and process any document.

Xu et al. and Koakutsu et al. disclose all of the subject matter as described as above except for specifically teaching the processor being arranged to extract and execute an embedded program *embedded* in the electronic form, linked to the user data input filed, *wherein the embedded program* generates commands to print geometrical elements of a barcode code, that represent a series of codewords derived *by the embedded program* from the characters in the string received *from the user data input field*, each codeword being represented as a respective configuration of printed geometrical elements and their background in a respective area of the barcode.

However, Marshall discloses the processor being arranged to extract and execute embedded program *embedded* in the electronic form (**column 2, lines 11-13; note that a program embedding a security features within barcodes is disclosed**), linked to the user data input filed, *wherein the embedded program* generates commands to print geometrical elements of a barcode code (**column 2, lines 11-17; note that the embedded program generates source code segments configured to receive a string of alphanumeric data and generate printable data**), that represent a series of codewords derived *by the embedded program* from the characters in the string received *from the user data input field* (**column 4, lines 49-52; note that per receiving the string of alphanumeric data, numerous patterns, sizes and shapes for embedded features can be programmed as described**), each codeword being represented as a respective configuration of printed geometrical elements and their background in a respective area of the barcode (**column 4, lines 52-55; note that the various patterns of barcodes including the source code or the embedded feature can be printed in the respective area of the barcode**).

Xu et al., Koakutsu et al. and Wu et al. and Marshall are combinable because they are from the same field of endeavor i.e. printing of a barcode. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art for the processor being arranged to extract and execute an embedded program *embedded* in the electronic document data, linked to the user data input filed, *wherein the embedded program* generates commands to print geometrical elements of a barcode code, that represent a series of codewords derived *by the embedded program* from the characters

in the string received *from the user data input field*, each codeword being represented as a respective configuration of printed geometrical elements and their background in a respective area of the barcode. The suggestion/motivation for doing so would have been in order to utilize a reliable and secure data embedded in a barcode (column 1, lines 44-54). Therefore, it would have been obvious to combine Xu et al. and Koakutsu et al. with Marshall to obtain the invention as specified in claim 9.

(2) regarding claim 10:

Xu et al. further discloses, an electronic document processor as claimed in claim 9, wherein the embedded program (**4 figure 1, paragraph 25, lines 10-19**) is arranged to make at least one of the configurations dependent on a further factor other than the codeword represented by the configuration that will be decoded upon decoding the barcode (**7 figure 1, paragraph 24, lines 5-11, paragraph 25, lines 10-21**).

(3) regarding claim 11:

Xu et al. further discloses, an electronic document processor as claimed in claim 9, wherein the embedded program makes the configurations dependent on the specific area in which the codeword is represented, so that mutually different configurations (**2, 3 figure 1, paragraph 21, lines 1-9**) will result to represent a specific codeword dependent on whether the specific codeword is represented in one region or another (**paragraph 24, lines 5-11, paragraph 25, lines 10-21**).

(4) regarding claim 12:

Xu et al. further discloses, an electronic document processor as claimed in claim 11, wherein the embedded program is arranged to control printing of the barcode as a two dimensional barcode (**paragraph 6, lines 2-7 "placed on an item" – similar to printing**), at least part of the areas having mutually different shapes, the embedded program adapting the commands to print the elements of the configuration that is uses to represent a codeword according to the shape of the area in which the codeword is represented (**35 figure 2, paragraph 34, lines 1-7**).

(5) regarding claim 13:

Xu et al. further discloses, an electronic document processor as claimed in claim 11, wherein the embedded program is arranged to include additional information in the areas (**could be a signature in an electronic form, paragraph 33, lines 16-21, Xu explains that the barcode could be decoded with an additional information independent of the initial information that had been stated**), the additional information being independent of the codeword represented in the areas, the additional information being included by adding geometrical elements, removing geometrical elements and/or modifying visual propertied of part of the geometrical elements that represent at least one of the codewords (**paragraph 33, lines 21-32**), dependent on the area in which the codeword is represented in a way that does not affect a decoded result when the barcode is scanned and decoded (**paragraph 37, lines 1-12**).

(6) regarding claim 14:

Xu et al. further discloses, an electronic document processor as claimed in claim 13, wherein the embedded program is arranged to print additional geometrical elements that extend from within a region that is defined by all geometrical elements (**101 figure 3A, graphic figure could have geometrical elements, paragraph 37, lines 6-8**) that will be used to decode the barcode in the printed document, to outside said region among further printed items of the document, so that the additional geometrical elements do not affect a decoded result when the barcode is scanned and decoded (**paragraph 37, lines 1-12**).

(7) regarding claim 15:

Xu et al. further discloses, an electronic document processor as claimed in claim 13, wherein the geometrical elements each have a property that does not affect the decoded data (**paragraph 27, lines 1-5**), the embedded program being arranged to set said property in different ones of geometrical elements in at least one area that represents a codeword differently during printing (**paragraph 54, lines 1-3, paragraph 55, line 3-4**).

(8) regarding claim 16:

Xu et al. further discloses, an electronic document processor as claimed in claim 15, wherein the embedded program is arranged to select a color and/or grey level density of different geometrical elements differently (**paragraph 25, lines 1-10,**

paragraph 27, lines 1-7), as a predetermined function of position in an area where the barcode is printed (**paragraph 51, lines 2-10 "there is no specific limitation for the printing the barcode; however the barcode could be printable"**).

Conclusion

7. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Hilina Kassa whose telephone number is (571) 270-1676.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore could be reached at (571) 272- 7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Hilina S Kassa/

Examiner, Art Unit 2625

May 12, 2008

/Mark K Zimmerman/

Supervisory Patent Examiner, Art Unit 2625